#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-022598 Address: 333 Burma Road **Date Inspected:** 11-Apr-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Mr. An Qing Xing No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component: OBG Segment** 

## **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (UT) – NWIT Document No: 008793

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Component. The weld designations reviewed are as follows:

- 1. SA6531-001- 117, 030
- 2. SA6531-001-113

Magnetic Particle Testing (MT) – NWIT Document No's: 008789

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Component. The weld designations reviewed are as follows:

- 1. BK28K1-001-001, 002, 003, 004, 005, 006, 007, 008
- 2. BK28K2-001-001, 002, 003, 004, 005, 006, 007, 008

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This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) repair welding of weld joint SB027-110-001 located on OBG Suspender Bracket SB110E. ZPMC Welder is identified as 062814. ZPMC Quality Control (QC) is identified as Mr. Li Ping. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-3G-(3F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20645.

SMAW repair welding of weld joint SB027-110-035 located on OBG Suspender Bracket SB110E. ZPMC Welder is identified as 062814. ZPMC Quality Control (QC) is identified as Mr. Li Ping. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-2G-(2F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20645.

SMAW repair welding of weld joint SB026-110-001 located on OBG Suspender Bracket SB110W. ZPMC Welder is identified as 062772. ZPMC Quality Control (QC) is identified as Mr. Li Ping. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-3G-(3F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20646.

SMAW repair welding of weld buttering/build up on SB25-108E-X64BC of OBG Suspender Bracket SB108E. ZPMC Welder is identified as 202338. ZPMC Quality Control (QC) is identified as Mr. Li Ping. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-2G-(2F)-FCM-Repair, which is used as per Critical Welding Repair Report (CWR) B-CWR-2877.

This QA inspector observed ZPMC personnel performed Ultrasonic Testing on Cable Bracket of OBG Component/Lift 12. The weld number is identifies as SA6531-001-113. See the attached pictures.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.





#### **Summary of Conversations:**

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Only general conversation was held between QA and QC concerning this project.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Kumar, Vibin	Quality Assurance Inspector
Reviewed By:	Patel, Hiranch	QA Reviewer